Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137

Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-1562-20-F Plant ID: 1562

Effective Date: 05/18/2020 Expiration Date: 05/31/2025

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Source: Coral Graphics Services, Inc.
4700 Commerce Crossings Drive
Louisville, KY 40229

Owner: Coral Graphics Services, Inc.
4700 Commerce Crossings Drive
Louisville, KY 40229

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve months and no later than ninety days prior to the expiration date.

Emission limitations to qualify for non-major status:

Pollutant:	VOC	Total HAP	Single HAP
Tons/year:	< 21 tpy	< 10 tpy	< 5 tpy

Application No.: See **Application and Related Documents** table.
Public Notice Date: 04/15/2020

Permit writer: Randy Schoenbaechler

Air Pollution Control Officer
5/18/2020

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Permit Revisions and Changes

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
O-1562-14-F	12/06/2014	01/23/2015	Initial	Initial Permit Issuance
O-1562-14-F (R1)	02/10/2017	03/14/2017	Sig.	Permit revision to include: permit C-1562-1003-16-F and emission units for previously omitted equipment. Update to General Condition 10, removal of greenhouse gas limits
			Admin	Addition of Insignificant Activities table. Addition of a Plantwide section Update to General Condition 12 and document submission address. Updates to Acronyms and Abbreviations list Update to Preamble
O-1562-20-F	04/15/2020	05/18/2020	Renewal	Reissuance of Permit including updating permit language and format and a correction to remove atmospheric evaporator as a control in Unit 1.

Construction Permit Summary Since Previous FEDOOP

Permit No.	Issue Date	Description
None	NA	NA

Application and Related Documents

Document Number	Date	Description
128329	5/24/2016	Letter regarding atmospheric evaporator
126093	12/10/2019	Email Application for FEDOOP

Document Number	Date	Description
126101	12/11/2019	Hard copy of Application for FEDOOP
126159	12/12/2019	Application Resubmittal
127405	1/6/2020	Requested SDS of Glue

Abbreviations and Acronyms

AP-42	- AP-42, *Compilation of Air Pollutant Emission Factors, published by U.S.EPA*
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
(M)SDS	- (Material) Safety Data Sheet
NAICS	- North American Industry Classification System
NO_x	- Nitrogen oxides
PM	- Particulate Matter
PM_{10}	- Particulate Matter less than 10 microns
$PM_{2.5}$	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO_2	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of annual fees is not made. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

G1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.

G2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable, and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.

G3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.

G4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-O.

G5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.

G6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.

G7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.

G8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit. The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or anticipated noncompliance shall not alter any permit requirement.

G9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 10 tons per year, or such lesser quantity as the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 25 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.

G10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 100 tons per year of any regulated pollutant, including particulate matter, PM_{10}, $PM_{2.5}$, sulfur dioxide, carbon monoxide, nitrogen oxides, lead, hydrogen sulfide, gaseous fluorides, total fluorides, or Volatile Organic Compounds (VOC); any pollutant subject to any standard in District Regulation 7.02; or any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA. Fugitive emissions shall be included in these limits for source categories listed in District Regulation 2.16.

G11. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.

G12. Unless specified elsewhere in this permit, the owner or operator shall submit semi-annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All compliance reports shall include the following per Regulation 2.17, section 3.5.

- A certification statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete", and
- The signature and title of a responsible official of the company.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

Reporting Period	**Report Due Date**
January 1 - June 30	August 29
July 1 - December 31	March 1 of the following year

G13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emission Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
1.18	Rule Effectiveness
1.19	Administrative Hearings
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.06	Permit Requirements – Other Sources
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
3.01	Ambient Air Quality Standards
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.04	Particulate and Sulfur Dioxide Reduction Requirements
4.05	Hydrocarbon and Nitrogen Oxides Reduction Requirements
4.06	Carbon Monoxide Reduction Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

G14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
2.17	Federally Enforceable District Origin Operating Permits
5.00	Definitions
5.01	General Provisions
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Hazardous Air Pollutants and Source Categories
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

G15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.

G16. The owner or operator shall submit timely reports of abnormal conditions or operational changes that may cause excess emissions, as required by Regulation 1.07.

G17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

Air Pollution Control District
701 W. Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137

Plantwide Requirements

Facility Description

Coral Graphics Services, Inc. is a printshop operating lithography presses, UV coaters, and laminators to produce custom prints for various customers.

Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
2.03	Permit Requirements – Non-Title V Construction and Operating Permits and Demolition/Renovation Permits	All
2.17	Federally Enforceable District Origin Operating Permits	All
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	All

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.00	Definitions	1, 2

Plantwide Specific Conditions

S1. Standards
[Regulation 2.17, section 5.1]

a. HAP

i. The owner or operator shall not allow or cause to allow the plantwide emissions of any individual HAP to equal or exceed 5 tons during any consecutive 12-month period. [Regulation 2.17, section 5.1]
[Regulation 5.00, section 1.13.5]

ii. The owner or operator shall not allow or cause to allow the plantwide emissions of all HAPs combined to equal or exceed 10 tons during any consecutive 12-month period. [Regulation 2.17, section 5.1]
[Regulation 5.00, section 1.13.5]

b. VOC

i. The owner or operator shall not allow or cause total plantwide VOC emissions to equal or exceed 21 tons during any consecutive 12-month period.[1,2,3] [permit C-1562-1003-16-F] [Regulation 2.17, section 5.1] [Regulation 5.00, section 1.13.5]

ii. The owner or operator shall store all VOC containing materials in closed containers when not in use. This includes materials such as inks, solvents, fountain solution, press cleaning materials, and waste materials including rags/wipes/paper used to clean press components.
[Regulation 7.25, section 3] (BACT)

iii. The owner or operator shall clean up all spills of any VOC containing materials no matter how small it is. If the spill is significant (i.e. more than one gallon), the owner or operator shall notify maintenance or professionals for assistance. [Regulation 7.25, section 3] (BACT)

iv. The owner or operator shall use the least amount of VOC containing materials needed for the job. [Regulation 7.25, section 3] (BACT)

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1 On March 18, 2016, the District received a permit application from Coral Graphics requesting limits of 21 tons per year for criteria pollutants, 10 tons per year of total HAP emissions, and 5 tons per year of an individual HAP. By requesting these limits and operating the equipment according to the standards of this permit in order to demonstrate compliance with the limits, the facility is not subject to the STAR program.

2 The source is potentially major for VOC, Combined HAP, and Single HAP (Xylene and Hexane). The source accepted less than 21 ton/year limit for VOC, 10 ton/year limit for Combined HAP, and less than 5 ton/year per single HAP as FEDOOP limits.

3 The 21 ton per year limit includes emissions from the usage of raw materials listed in the Standards section of Emission Unit U1 as well as any other raw materials containing VOC which are not listed. These materials include but are not limited to: plate developer, coatings that are part of the inks, plate gum, blanket fix, silicon spray, and SMK-OD etching solution.

S2. Monitoring and Record Keeping[4]

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. HAP

i. The owner or operator shall, monthly, calculate and record the total monthly individual HAP emissions as well as the consecutive 12-month rolling total individual HAP emissions for each individual HAP.

ii. The owner or operator shall, monthly, calculate and record the total monthly HAP emissions as well as the consecutive 12-month rolling total HAP emissions for all HAP-containing products combined.[5]

iii. The owner or operator shall maintain monthly records of the name, quantity, and HAP content for each HAP-containing material used during each calendar month and consecutive 12-month period.

iv. The owner or operator shall maintain a copy of the material safety data sheets (MSDS/SDS) for each HAP-containing material used at this plant.

b. VOC

i. The owner or operator shall, monthly, calculate and record the total monthly VOC emissions as well as the consecutive 12-month rolling total VOC emissions for all VOC containing materials combined.[6]

ii. The owner or operator shall maintain monthly records of the name, quantity used, and VOC content for each of the following raw materials: inks, fountain solution concentrate, fountain solution additive, blanket wash, roller wash, press cleaning materials, and any other VOC-containing material used during each calendar month and consecutive 12-month period.

iii. The owner or operator shall maintain a copy of the material safety data sheets (MSDS/SDS) for each VOC containing material used at this plant.

S3. Reporting

[Regulation 2.17, section 5.2]

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4 Appendix A contains a summary of the compliance monitoring and record keeping requirements necessary to reasonable assure compliance with the District regulations and terms of this permit.

5 For HAP calculation methods, see Appendix B.

6 For VOC calculation methods, see Appendix B.

The owner or operator shall report the following information, as required by General Condition G12:

a. HAP

i. The monthly and 12 consecutive month rolling totals of calculated individual HAP emissions for each month during the reporting period.

ii. The monthly and 12 consecutive month rolling totals of calculated total HAP emissions for each month during the reporting period.

b. VOC

i. The monthly and 12 consecutive month rolling totals of calculated VOC emissions for each month during the reporting period.

Emission Unit U1: Printers and Laminators

Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
7.08	Standards of Performance for New Process Operations	1 – 3
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	All

Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E1	Komori, model LS 440 P, 4-color, sheet-fed offset lithography press, 40"x28" paper stock, batch, auto wash, corn starch anti-sticking spray	7/2005	7.08, 7.25	C2	NA
E2	Komori, model LS 840 P, 8-color, sheet-fed lithography press, 40"x28" paper stock, batch, auto wash, corn starch anti-sticking spray	7/2005	7.08, 7.25	C2	NA
E3	Komori, model LS 840 P, 8-color, sheet-fed offset lithography press, 40"x28" paper stock, auto wash, batch, corn starch anti-sticking spray	1/2006	7.08, 7.25	C2	NA
E4	Komori, model GL 640-45C, 6-color, UV press, auto wash	6/2016	7.25	NA	NA
E5	Komori, model 1040 P, 10-color sheet-fed lithography press, auto wash, continuous, corn starch anti-sticking spray	12/2007	7.08, 7.25	C2	NA
E6	Komori, model 828, 8-color, offset printing press, auto wash, continuous, corn starch anti-sticking spray	12/2007	7.08, 7.25	C2	NA
E7 (IA)	Steinemann UV coater, model GLM102, 40"x28" paper stock, batch	12/2005	7.25	NA	NA
E8 (IA)	Man Roland sheet-fed UV press, batch	12/2007	7.25	NA	NA
E9 (IA)	Sakurai, model SC102DX UV coater, sheet fed	12/2007	7.25	NA	NA

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E10 (IA)	Sakurai, model SC102DX UV coater, sheet fed	6/2010	7.25	NA	NA

Control Devices

Control ID	Description	Control Efficiency
C2	Baghouse 4,300 cfm for PM, PM10, PM2.5 application date 2011	98%

Equipment Not Regulated

Description
Atmospheric Evaporator, Apollo, 20 GPH, application date 8/2008 no added emissions
E11 (IA) (4) Genesis, model GBC 30, batch, no emissions
E12 (IA) (1) Genesis, model GBC 40, batch, no emissions

U1 Specific Conditions

S1. Standards
[Regulation 2.17, section 5.1]

a. HAP

i. See Emission Unit Plantwide.

b. Opacity

i. The owner or operator shall not allow visible emission to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

c. PM

i. The owner or operator shall not allow PM emissions from each individual printing press (E1, E2, E3, E4, E5, and E6) to exceed 2.34 lb/hr per piece of equipment based on actual operating hours in a calendar day.[7]
[Regulation 7.08, 3.1.2]

d. VOC

i. The District has determined that compliance with the following VOC requirements represent Best Available Control Technology (BACT). [8]

[7] A one-time PM compliance demonstration has been performed for each piece of equipment in this emission unit and the lb/hr standard should be met uncontrolled.

[8] The District has determined that the use of raw materials that comply with the emission standards in Specific Condition S1.a.ii represents BACT level of control for the presses and coaters.

Raw Material	BACT Limit
(Non-Heat Set) Conventional Inks [9]	18% by weight VOC
(Non-Heat Set) Specialty Inks (including, but are not limited to, metallic, magnetic, fluorescent, and iridescent inks)	25% by weight VOC 10% of total ink usage
(Heat Set) Inks	45% by weight VOC
(Non-Heat Set) Fountain Solution	Non-Vinyl: 5% by weight VOC as applied; or 8.5% by weight if Chilled Fountain Solution at 60°F max.; Vinyl or Plastic Sheets: 10% by weight as applied
(Heat Set) Fountain Solution	1.6% by weight, if the fountain solution contains alcohol and is not chilled 3 % by weight, if the fountain solution contains alcohol and is chilled to 60°F or 5% by weight, if the fountain solution contains no alcohol and is not chilled, or 6% by weight, if the fountain solution contains no alcohol and is chilled to 60°F
Blanket Wash	70% by weight VOC as applied or vapor pressure ≤ 10 mm Hg at 68°F
Roller Wash	70% by weight VOC as applied or vapor pressure ≤ 10 mm Hg at 68°F
Water-based Coatings (Aqueous)	1.0 lb VOC/gal as applied

[Construction Permit C-1562-1003-16-F] [Regulation 7.25, section 3] (BACT)

ii. If the fountain solution VOC content is greater than 5% by weight as applied, then the owner or operator shall maintain the temperature at or below 60°F for each fountain solution reservoir.
[Regulation 7.25, section 3] (BACT)

iii. See Emission Unit Plantwide.

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. HAP

i. See Emission Unit Plantwide.

b. Opacity

[9] Per EPA guidance document for Lithographic Printing and Letterpress Printing dated September 2006, the document defines varnishes as un-pigmented offset lithography inks, and therefore are to be included in the conventional ink category.

i. There are no monitoring or record keeping requirements for this equipment for Opacity.

c. PM

i. There are no monitoring or record keeping requirements for this equipment for PM.

d. VOC

i. The owner or operator shall maintain monthly records that show the quantity (in pounds) of specialty inks used during each calendar month and calculate the percentage of the total inks used that are classified as specialty inks as determined on a consecutive 12-month basis.

ii. The owner or operator shall determine the VOC content (as applied) of each batch of press-ready fountain solution by one of the following methods:

(1) The owner or operator shall determine the VOC content of each batch of press-ready fountain solution by calculation. The calculation shall be kept in a batch log. The owner or operator shall document any deviation from the standard fountain solution makeup. Any manual additions of VOC made after each fountain solution batch is prepared shall be documented and the VOC content of the fountain solution shall be calculated to demonstrate compliance with the as applied fountain solution standard. Documentation of any deviations or manual additions shall include the date and time of occurrence.

(2) Alternatively, a sample of the fountain solution (as applied) may be taken from the fountain solution tray or reservoir and measured with a hydrometer, refractometer, or conductivity meter. Within 30 days after the effective date of this permit, the owner or operator shall establish the appropriate compliance indicator ranges for each of the analytical methods above that the source will use to demonstrate compliance with the fountain solution VOC content (as applied). Upon District approval of the established compliance indicator ranges, the owner or operator shall analyze the VOC content of each fresh batch of press ready fountain solution as prepared and after each addition of a VOC containing material to the fountain solution reservoir made following a fresh batch of fountain solution prepared. The owner or operator shall maintain daily records of the results of each observed reading including the date, time, and the name of the person who observed the reading.

iii. The owner or operator of a lithographic press using automatic cleaning equipment (e.g. blanket washers) that mixes the cleaning solution at the point of application, and who must demonstrate the cleaning solution (as

applied) complies with the standard shall:

(1) Operate, maintain, and calibrate the automatic feed equipment to regulate the volume of each cleaning solvent and water (or other non-VOC), as mixed; and

(2) Preset the automatic feed equipment so that the consumption rates of the cleaning solvents and water (or other non-VOC), as-applied are in compliance with the standard.

iv. For each batch of blanket wash, roller wash, or other cleaning solution not prepared with automatic equipment, the VOC content of the cleaning solution (as applied) shall be determined by calculation. The calculation shall be kept in a batch log. The owner or operator shall document any additions of VOC or deviation from the standard cleaning solution makeup including the date and time of occurrence.

v. The owner or operator shall use a thermometer or other temperature detection device capable of reading to within 2.0 degrees to measure and record the temperature of each fountain solution reservoir once per day for each operating day and keep daily records of the temperature.

vi. See Emission Unit Plantwide.

S3. Reporting
[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. HAP

i. See Emission Unit Plantwide.

b. Opacity

i. There are no reporting requirements for this equipment for Opacity.

c. PM

i. There are no reporting requirements for this equipment for PM.

d. VOC

i. Identification and brief description of any deviation from a permit term or condition, including periods of excess emissions. If there are no deviations from a permit condition or excess emissions during a given reporting period,

the owner or operator shall submit a negative declaration stating no permit deviations or excess emissions occurred during the reporting period.[10]

ii. See Emission Unit Plantwide.

[10] Permit deviations include, but are not limited to, raw materials usages that exceed the requirements as stated.

Emission Unit U2: PM Processes

Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
7.08	Standards of Performance for New Process Operations	1 – 3

Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E13	Paper scrap system: cyclone & baler	2005	7.08	C2	NA
E14 (IA)	Bindery operation	9/2005	7.08	NA	NA
E15 (IA)	Bobst SA, model 0571-068-02, embossing machine	2008	7.08	NA	NA
E16 (IA)	Bobst SA, model 0572-016-04, foil stamping machine	2008	7.08	NA	NA

U2 Specific Conditions

S1. Standards
[Regulation 2.17, section 5.1]

a. Opacity

i. The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

b. PM

i. For E13 the owner or operator of the Paper Scrap System shall not allow or cause the PM emissions to exceed 4.5 lb/hr based on actual operating hours in a calendar day.[11] [Regulation 7.08, section 3.1.2]

ii. For E14, E15, and E16 the owner or operator of the Bindery Operation, Bobst Embosser, or Bobst Foil Stamping (E14, E15, E16) shall not allow or cause the PM emissions to exceed 2.34 lb/hr per piece of equipment based on actual operating hours in a calendar day.[12]
[Regulation 7.08, section 3.1.2]

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. Opacity

i. There are no monitoring or record keeping requirements for this equipment for Opacity.

b. PM

i. There are no monitoring or record keeping requirements for this equipment for PM.

S3. Reporting
[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

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11 The District has determined that the emission point E-13" Paper Scrap System" should meet the lb/hr limit uncontrolled.

12 The District has determined that the emission points E14, E15, E16 should meet the lb/hr limit uncontrolled.

a. Opacity

i. There are no reporting requirements for this equipment for Opacity.

b. PM

i. There are no reporting requirements for this equipment for PM.

Emission Unit U3: VOC Processes

Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	All

Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E17 (IA)	Plate developer, continuous, 2 x 5' bath	2005	7.25	NA	NA
E18 (IA)	Plate developer, continuous, 2 x 5' bath	2003	7.25	NA	NA
E19 (IA)	Sakurai screen manufacturing, batch	2007	7.25	NA	NA

U3 Specific Conditions

S1. Standards
[Regulation 2.17, section 5.1]

a. VOC

i. For E17, E18, and E19 and any new equipment installed, the owner or operator shall limit the VOC emissions to less than or equal to 5.0 tons per 12 consecutive month period total unless a BACT is approved.
[Regulation 7.25, section 3.1]

ii. See Plantwide Emission Unit.

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. VOC

i. For E17, E18, and E19 the owner or operator shall keep monthly records, including calculations, of all VOC emissions during each calendar month and consecutive 12-month period.

ii. See Plantwide Emission Unit.

S3. Reporting
[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. VOC

i. See Plantwide Emission Unit.

Insignificant Activities

Equipment	Qty.	PTE (ton/yr)	Regulation Basis
Steinemann UV coater, model GLM102, 40"x28" paper stock, batch (Emission Unit U1 – E7)	1	VOC = 0.114	Regulation 1.02
Man Roland sheet-fed UV press, batch (Emission Unit U1- E8)	1	VOC = 0.066	Regulation 1.02
Sakurai, model SC102DX UV coater, sheet fed (Emission Unit U1 – E9 & E10)	2	VOC = 0.044	Regulation 1.02
Plate developer, continuous, 2 x 5' bath (Emission Unit U3 – E17 & E18)	2	VOC = 0.0425	Regulation 1.02
Sakurai screen manufacturing, batch (Emission Unit U3 – E19)	1	VOC = 0.218	Regulation 1.02

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.

2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.

3. The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.

4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.

5. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.

6. The District has determined that no monitoring, recordkeeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

Equipment Not Regulated

Equipment	Quan.	PTE (tpy)	Regulation Basis
Atmospheric Evaporator, Apollo, 20 GPH, application date 8/2008 no added emissions	1	NA	NA
Genesis, model GBC 30, batch, no emissions	4	NA	NA
Genesis, model GBC 40, batch, no emissions	1	NA	NA
Bindery operation	1	NA	NA
Maintenance soldering & welding equipment	1	Trivial	EPA White Papers

Appendix A – Compliance Monitoring Summary

The following table summarizes the compliance monitoring methods to reasonably assure compliance with District regulations and the terms and conditions of this permit: (Regulation 2.03, section 5.1) (Regulation 7.25, section 3) (BACT)

Pollutant	Monitoring	Record Keeping	Frequency
VOC	Raw material usage	Record the monthly usage of each VOC containing material	Monthly
	Emissions	Calculate and record the calendar month and rolling 12-month total VOC emissions	Monthly
	Fountain solution temperature	Record the temperature of each fountain solution reservoir	Daily
	Fountain solution VOC content	See Specific Condition **Error! R eference source not found.**.	As required
	Raw material VOC content	Maintain a copy of the MSDS for each VOC containing material used	Continuous
HAP	Raw material usage	Record the calendar month usage of each HAP containing material	Monthly
	Emissions	Calculate and record the calendar month and rolling 12-month total HAP emissions	Monthly
	Raw material HAP content	Maintain a copy of the MSDS for each HAP containing material used	Continuous

Appendix B –Calculation Methods

Emissions are calculated by multiplying the throughput (ton, MMCF, gallons, etc) or hours of operation of the equipment by the appropriate emission factor and 1 minus any control device's efficiency. The following emission factors and calculation methodology shall be used unless other methods or emission factors are approved in writing by the District.

a. VOC/HAP

i. Off-Set Lithography Sheet-Fed Presses

$$E_{VOC/HAP} = (I_{VOC/HAP})(I_{Ret}) + (FS_{VOC/HAP}) + (BW_{VOC/HAP}) + (RW_{VOC/HAP}) + (C_{VOC/HAP}) + (CS_{VOC/HAP})(R)$$

Where,

$E_{VOC/HAP}$	=	lb VOC/HAP Emissions
$I_{VOC/HAP}$	=	lb of sheet-fed ink used × weight % VOC/HAP in each ink
I_{Ret}	=	0.050 (Derived from: 1 - Ink oil retention factor of 0.95 for non-heatset inks)
$FS_{VOC/HAP}$	=	Qty of fountain solution used (gallons) × VOC/HAP content of fountain solution as applied (lb/gal)
$BW_{VOC/HAP}$	=	Qty of blanket wash used (gallons) × VOC/HAP content of blanket wash as applied (lb/gal)
$RW_{VOC/HAP}$	=	Qty of roller wash used (gallons) × VOC/HAP content of roller wash as applied (lb/gal)
$C_{VOC/HAP}$	=	Qty of coatings used (gallons) × VOC/HAP content of coating as applied (lb/gal)
$CS_{VOC/HAP}$	=	Qty of each cleanup solvent used (gallons) × VOC/HAP content as applied (lb/gal)
R	=	1.0 or 0.50 (Fraction of cleanup solvent unrecovered)

An "R" factor of 0.50 (50 percent VOC credit) may be used for solvents (vapor pressure ≤ 5 mm Hg at 68°F) used to manually clean press components if the rags/wipes used to manually clean press components are stored in closed/sealed containers immediately after use and the company can document the quantity of solvent recovered.

ii. The owner or operator shall account for the insignificant activity VOC emissions from printing, laminating, and plate developing when totaling the annual plantwide emissions. Since the emissions are minor the owner or operator may use the potential VOC emissions as the annual emissions or may use a mass balance assuming all VOC throughput is emitted. District approved PTE is as follows:

- Steinemann UV (E7) = 1.1 ton VOC/year
- Man Roland UV (E8) = 0.7 ton VOC/year
- Sakurai, model SC 102 DX (E9) = 0.4 ton VOC/year
- Sakurai, model SC 102 DX (E10) = 0.4 ton VOC/year
- Plate developing (E17) = 0.000000211 ton VOC/year

- Plate Developing (E18) = 0.00000000211 ton VOC/year
- Screen manufacturing (E19) = 0.22 ton VOC/year

Fee Comment

The company is required to pay annual fees.